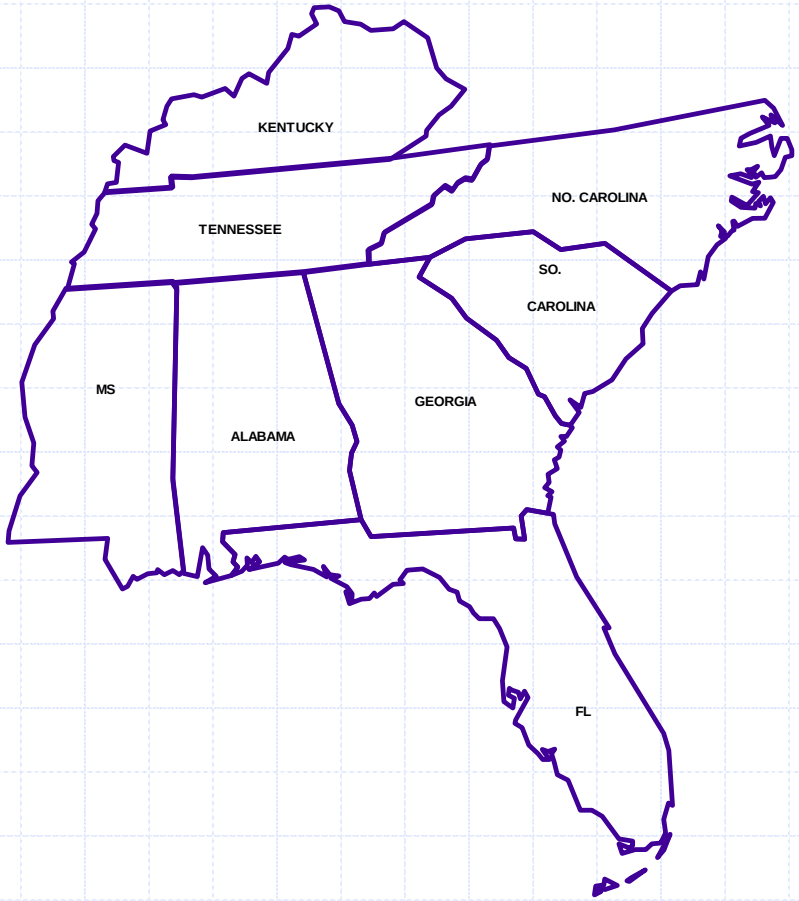
EPA - Region 4

Atlanta, Georgia



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Nutrient Criteria Development in Region 4

Status and Progress

Gulf of Mexico Alliance – Nutrient Criteria Conference
ORD Gulf Ecology Division
Gulf Breeze, FL
January 17, 2007

Region 4 Strategy for Nutrient Criteria Development

- To work with EPA/HQ to successfully implement EPA's National Nutrient Strategy

- To provide support and assistance to R4 States and Tribes in development of numeric nutrient criteria

Some Specific Region 4 Activities to facilitate Nutrient Criteria

- Region 4 Nutrient Task Force
- Regional Periphyton Assessment Effort
- Chl a methodology study
- Northern Gulf Estuaries Pilot Project
- Cross-Regional coordination
- ORD Collaboration
- R4 RTAG Meeting March 2007
- Utilization of Regional Nutrient funding
- Participation on State workgroups, task forces, TAC
- Nutrient TMDL development

Region 4 State Progress Summary for Numeric Nutrient Criteria

All Region 4 States have Nutrient Criteria Plans mutually agreed with EPA, and each State's progress is evaluated according to the schedule provided in each state plan.

- **AL** is using weight of evidence to develop criteria for 41 largest lakes/reservoirs (80% of lake area in AL), with 29 adopted (chl a only); workgroup for rivers/streams (reference approach); and participating in Northern Gulf Nutrient Pilot Project (GMPO, R4 & R6) for shared estuary/coastal waters. Wetlands will be addressed last.
- **FL** established a TAC for nutrient criteria for rivers/streams and lakes/reservoirs; expects to submit criteria for adoption in 2006/7; sub-classifying uses in South FL canals; will address estuaries and coastal, and then wetlands in turn. Adopted P criteria for Everglades.
- **GA** adopted 6 lakes (Chl a, N, and P); is evaluating further data needs for developing nutrient criteria for rivers/streams and lakes/reservoirs. Will address estuaries and coastal, and then wetlands in turn.

Region 4 State Progress Summary for Numeric Nutrient Criteria (cont'd)

- **KY** is correlating biological response (diatom index) with nutrient levels in wadeable streams; then addressing lakes/reservoirs, and large rivers (with ORSANCO). No mention of wetlands.
- **MS** established a task force rivers/streams, lakes/reservoirs, and is participating in Northern Gulf Nutrient Pilot Project (GMPO, R4 & R6) for shared estuary/coastal waters. No plans for wetlands.
- **NC** is reviewing existing criteria (15/40 ug/L TP) for non-flowing waters (lakes, reservoirs, estuaries); will address flowing waters considering periphyton. No plans for wetlands.
- **SC** has adopted standards for all lakes/reservoirs (> 40 acres); working on criteria development for rivers/streams and estuaries/coastal waters. No plans for wetlands.
- **TN** adopted numeric translator for narrative criteria for wadeable streams (NO_2-NO_3 and TP) in 2004. Currently working on lakes/reservoirs. Wetlands considered, but not currently scheduled.

Some Application in Region 4 for TMDL Targets

- AL
  - Lake specific Chl a by weight of evidence
  - Cahaba River TP by reference condition
- FL
  - Some effects based relationships
  - Some reference condition approach
- MS
  - R&S TP & TN by percentile of unimpaired for ecoregion w/i state
- NC
  - Chl a criteria
- TN
  - R&S TP & NO_2-NO_3 translators by ecoregion reference condition

Dual Nutrient Approach
Both N and P Should Addressed

- The objective of the National Strategy is to address overall over-enrichment of aquatic and marine habitats
  - More complicated than fixing a localized problem in the near-field